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PTO/SB/05 (4/98) Approved for use through 09/30/2000, OMB 0651-0032
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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## UTILITY PATENT APPLICATION TRANSMITTAL

Attorney Docket No. 3419-011158 First Inventor or Application Identifier RYAN, William R.

Title RECUPERATOR FOR USE WITH TURBINE/TURBO-ALTERNATOR

(Only for new nonprovisional applications under 37 C.F.R. § 1.53(b))

|                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                              | Express                    | Mail Labe           | INO. EL/03381013                               | -08          |                                                         | <del></del> |
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|                                                                                                                                                                                                                                                                                                                                                                                                                                       | ICATION ELEMENTS oncerning utility patent application                                                                                                                                                                        | n contents.                |                     | ADDRESS TO:                                    | Box Pate     | sioner For Patents<br>ent Application<br>gton, DC 20231 | 11002       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                       | mittal Form (e.g., PTO/SB/17<br>original and a duplicate for f                                                                                                                                                               |                            | 5.                  | Microfiche Compu                               | ter Progra   | m (Appendix)                                            |             |
| 2. X Specificatio                                                                                                                                                                                                                                                                                                                                                                                                                     | n [Total Farrangement set forth below)                                                                                                                                                                                       | ages <u>19</u> ]           |                     | otide and/or Amino A<br>licable, all necessary |              | ence Submission                                         |             |
| - Descripti                                                                                                                                                                                                                                                                                                                                                                                                                           | ve title of the Invention                                                                                                                                                                                                    |                            | a                   | Computer Reada                                 | ble Copy     |                                                         |             |
|                                                                                                                                                                                                                                                                                                                                                                                                                                       | ferences to Related Application t Regarding Fed sponsored R                                                                                                                                                                  |                            | b                   | Paper Copy (ide                                | ntical to co | omputer copy)                                           |             |
|                                                                                                                                                                                                                                                                                                                                                                                                                                       | e to Microfiche Appendix<br>and of the Invention                                                                                                                                                                             |                            | c.                  | Statement verify                               | ing identit  | ty of above copies                                      |             |
| •                                                                                                                                                                                                                                                                                                                                                                                                                                     | nmary of the Invention                                                                                                                                                                                                       |                            |                     | ACCOMPANYING                                   | 2 ADDI IC    | TATION DADTS                                            |             |
|                                                                                                                                                                                                                                                                                                                                                                                                                                       | scription of the Drawings (if f                                                                                                                                                                                              | iled)                      |                     | ACCOMPANTIN                                    | JAPPLIC      | ATION FARIS                                             |             |
| - Detailed                                                                                                                                                                                                                                                                                                                                                                                                                            | Description                                                                                                                                                                                                                  | ned)                       | 7. X                | Assignment Papers                              | (cover she   | eet & document(s))                                      |             |
| - Claim(s)<br>- Abstract                                                                                                                                                                                                                                                                                                                                                                                                              | of the Disclosure                                                                                                                                                                                                            |                            | 8.                  | 37 C.F.R.§3.73(b) (when there is an as         |              | Power of Attorney                                       |             |
| 3. X Drawing(s)                                                                                                                                                                                                                                                                                                                                                                                                                       | (35 U.S.C. 113) [Total S                                                                                                                                                                                                     | heets 11]                  | 9.                  | English Translation                            | Documer      | nt (if applicable)                                      |             |
| 4. Oath or Dec                                                                                                                                                                                                                                                                                                                                                                                                                        | elaration [Total]                                                                                                                                                                                                            | Pages 2]                   | 10.                 | Information Disclos<br>Statement (IDS)/P7      |              | Copies of Citations                                     | IDS         |
| a. Ne                                                                                                                                                                                                                                                                                                                                                                                                                                 | ewly executed (original or cop                                                                                                                                                                                               | у)                         | 11. X               | Preliminary Amer                               | dment        |                                                         |             |
|                                                                                                                                                                                                                                                                                                                                                                                                                                       | Copy from a prior application or continuation/divisional with Box                                                                                                                                                            |                            | 12. X               | Return Receipt Pos<br>(Should be specific      |              |                                                         |             |
| (101 continuation divisional with box 10 completed)                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                              |                            | 13*                 |                                                |              | nt filed in prior applicat                              | tion,       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                              |                            | F F                 |                                                |              |                                                         |             |
|                                                                                                                                                                                                                                                                                                                                                                                                                                       | see 37 C.F.R. §§ 1.63(d)(2                                                                                                                                                                                                   | e) and 1.33(b).            | 14.                 | Certified Copy of P<br>(if foreign priority i  |              |                                                         |             |
| PAY SMALL EN<br>IS REQUIRED (3                                                                                                                                                                                                                                                                                                                                                                                                        | S 1 <u>&amp; 13</u> : IN ORDER TO BE<br>TITY FEES, A SMALL ENTITY<br>7 C.F.R. § 1.27), EXCEPT IF ON<br>TION IS RELIED UPON (37 C.F                                                                                           | STATEMENT<br>JE FILED IN A | 15.                 | Other:                                         |              |                                                         |             |
| 16. If a CONTINUIN                                                                                                                                                                                                                                                                                                                                                                                                                    | NG APPLICATION, check app                                                                                                                                                                                                    | ropriate box, and supp     | l<br>oly the requis | ite information below a                        | nd in a prel | iminary amendment:                                      |             |
|                                                                                                                                                                                                                                                                                                                                                                                                                                       | 16. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment:  Continuation X Divisional Continuation-in-part (CIP) of prior application No: 09/571,195 |                            |                     |                                                |              |                                                         |             |
| Prior application                                                                                                                                                                                                                                                                                                                                                                                                                     | information: Examiner C                                                                                                                                                                                                      | harles G. Greay            |                     | Group / Art Unit:                              | 3746         |                                                         |             |
| For CONTINUATION or DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 4b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation <u>can only</u> be relied upon when a portion has been inadvertently omitted from the submitted application parts. |                                                                                                                                                                                                                              |                            |                     |                                                |              |                                                         |             |
|                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                              | 17. CORRESPON              | DENCE AI            | DDRESS .                                       |              |                                                         |             |
| Customer Nun                                                                                                                                                                                                                                                                                                                                                                                                                          | nber or Bar Code Label (Ins                                                                                                                                                                                                  | sert Customer No. or A     | Attach bar co       | de label here) or                              | X Corre      | espondence address bel                                  | ow          |
| Name                                                                                                                                                                                                                                                                                                                                                                                                                                  | Paul M. Reznick                                                                                                                                                                                                              |                            |                     |                                                |              |                                                         |             |
| Webb Ziesenheim Logsdon Orkin & Hanson                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                              |                            |                     |                                                |              |                                                         |             |
| Address Puilding                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                              |                            |                     |                                                |              |                                                         |             |
| 436 Seventh Avenue                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                              |                            |                     |                                                |              |                                                         |             |
| City                                                                                                                                                                                                                                                                                                                                                                                                                                  | Pittsburgh                                                                                                                                                                                                                   | State                      | PA                  |                                                | Code         | 15219                                                   |             |
| Country                                                                                                                                                                                                                                                                                                                                                                                                                               | United States                                                                                                                                                                                                                | Telephone                  | 412-471             | -8815                                          | Fax          | 412-471-4094                                            |             |
| Name (Print/Type) Paul-M. Reznick Registration No. (Attorney/Agent) 33,059                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                              |                            | ]                   |                                                |              |                                                         |             |
| Signature                                                                                                                                                                                                                                                                                                                                                                                                                             | Fail m. 06                                                                                                                                                                                                                   | nut                        |                     |                                                | Date         | 0/22/01                                                 |             |

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Office, Patent and Trademark Office, Washington, D.C. 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Box Patent Application, Washington, D.C. 20231.

| PATENT APPLICATION TRANSMITTAL LETTER                                  |
|------------------------------------------------------------------------|
| Commissioner for Patents Washington, D.C. 20231                        |
| Transmitted herewith for filing is the patent application of:          |
| WILLIAM R. RYAN                                                        |
| Entitled: RECUPERATOR FOR USE WITH TURBINE/TURBO-ALTERNATOR            |
| Small Entity Status:                                                   |
| Small Entity Statement under 37 CFR 1.27 is enclosed                   |
| Small Entity Status is asserted for this application under 37 CFR 1.27 |
| Enclosed are: X 11 sheets of drawings                                  |
| X An Assignment of the invention to: Elliott Energy Systems, Inc.      |
| X Declaration                                                          |
| Non-Publication Request Under 37 C F.R. 81 213                         |

## **CLAIMS AS FILED**

|                            | Small<br>Entity | Non-Small<br>Entity |                  |
|----------------------------|-----------------|---------------------|------------------|
| No. Filed No. Extra        | Rate            | Rate                | Charge           |
| Total                      |                 |                     |                  |
| Claims $10$ $-20 = 0$      | x \$ 9.00       | x \$ 18.00          | \$ <u>0</u>      |
| Indep.                     |                 |                     |                  |
| Claims $3 - 3 = 0$         | x \$ 40.00      | x \$ 80.00          | \$ <u>0</u>      |
| Multiple Dependent Claim/s | + \$135.00      | + \$270.00          | \$ <u>0</u>      |
| Basic Fee                  | + \$355.00      | + \$710.00          | \$ <u>710.00</u> |
|                            | Total of above  | Charges             | \$ <u>710.00</u> |
|                            | Total Fee       |                     | \$ 710.00        |

A check in the amount of \$710.00 is enclosed to cover the filing fee.

The Commissioner is hereby authorized to charge payment of any additional filing fees required under 37 CFR 1.16 or patent application processing fees under 37 CFR 1.17 associated with this communication to Deposit Account No. 23-0650. Please refund any overpayment to Deposit Account No. 23-0650.

An original and two copies of this sheet are enclosed.

 $\frac{8/22/61}{\text{Date}}$ 

Paul M. Reznick

Attorney for Applicant Registration No. 33,059

700 Koppers Building

436 Seventh Avenue

Pittsburgh, PA 15219-1818 Telephone: 412-471-8815

Facsimile: 412-471-4094

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

| IN RE APPLICATION OF:       | ATTORNEY'S DOCKET NUMBER  |
|-----------------------------|---------------------------|
| William R. RYAN             | 3419-011158               |
| ENTITLED                    |                           |
| "RECUPERATOR FOR USE WITH T | TURBINE/TURBO-ALTERNATOR" |

To the Application Branch

Assistant Commissioner for Patents Washington, D.C. 20231

#### **EXPRESS MAIL CERTIFICATE**

"Express Mail" Label Number <u>EL763581615US</u>

Date of Deposit August 22, 2001

I hereby certify that the following attached papers:

UTILITY PATENT APPLICATION TRANSMITTAL (1 pp.); FEE TRANSMITTAL FORM (1 p. in trip.); PRELIMINARY AMENDMENT (2 pp.); SPECIFICATION AND CLAIMS (31 pp.); DRAWINGS (11 sheets); COPY OF DECLARATION AND POWER OF ATTORNEY (2 pp.) COPY OF RECORDATION FORM COVER SHEET (2 pp.); COPY OF ASSIGNMENT (1 p.); AND COPY OF NOTIFICATION OF FILING OF CONTINUING OR DIVISIONAL APPLICATION (1 p.)

are being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. §1.10 on the date indicated above and is addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231.

Teresa K. Donehue

(Typed name of person mailing paper or fee)

(Signature of person mailing paper or fee)

Attorney's Docket No. 3419-000347

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | In re application of: William R. RY                                                                                                                                                                                                                   | YAN                                                                                                                                                                                                |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Serial No.: <u>09/571,195</u>                                                                                                                                                                                                                         | Group Art Unit: <u>3746</u>                                                                                                                                                                        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Filing Date: <u>May 16, 2000</u>                                                                                                                                                                                                                      | Examiner: Charles G. Freay                                                                                                                                                                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Title: "Recuperator for Use With T                                                                                                                                                                                                                    | Curbine/Turbo-Alternator''                                                                                                                                                                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Commissioner for Patents Washington, D.C. 20231                                                                                                                                                                                                       |                                                                                                                                                                                                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                       | Pittsburgh, Pennsylvania<br>August 22, 2001                                                                                                                                                        |
| Ling only the second of the se                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | NOTIFICATION OF FILING O                                                                                                                                                                                                                              | OF CONTINUING OR DIVISIONAL APPLICATION                                                                                                                                                            |
| THE STREET STREE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Notification is hereby being made of                                                                                                                                                                                                                  | of the filing of a:                                                                                                                                                                                |
| 20 20 20 20 20 20 20 20 20 20 20 20 20 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | ☐ Continuation                                                                                                                                                                                                                                        |                                                                                                                                                                                                    |
| - 201<br>- 201 | ⊠ Divisional                                                                                                                                                                                                                                          |                                                                                                                                                                                                    |
| તમાર જાવાન છાલા તમાર<br>કું કું મુખ્યાં કુંપાલ મુખ્ય કું કું<br>કું મુખ્યાં કુંપાલ મુખ્ય કુંપાલ મુખ્ય<br>મુખ્ય મુખ્ય મુખ્ય મુખ્ય                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | application for this case                                                                                                                                                                                                                             |                                                                                                                                                                                                    |
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|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                       | Respectfully submitted,                                                                                                                                                                            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                       | WEBB ZIESENHEIM LOGSDON ORKIN & HANSON, P.C.  By Paul M. Reznick                                                                                                                                   |
| the United S<br>addressed to<br>on August 2:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | tify that this correspondence is being deposited with tates Postal Service as first class mail in an envelope Commissioner for Patents, Washington, D.C. 20231 2, 2001.  July M. Reznick, Registration No. 33,059  Jame of Registered Representative) | Registration No. 33,059 700 Koppers Building 436 Seventh Avenue Pittsburgh, PA 15219-1818 Attorney for Applicants Telephone No. 412.471.8815 Facsimile No. 412.471.4094 E-mail webblaw@webblaw.com |